

WHAT IS CLAIMED IS:

- 5
1. An oil or gas well slip system comprising:
 a slip bowl having an interactive contact surface;
 a slip assembly having a mating interactive contact
10 surface for slidable engagement with the slip bowl interactive
 contact surface, wherein the slip bowl and the slip assembly
 are each comprised of a first material; and
 a second material attached to the interactive
15 contact surface of either the slip bowl or the slip assembly,
 wherein the second material is compositionally different from
 the first material to prevent cold welding between the slip
 bowl and the slip assembly and wherein the second material has
 little or no tendency to dissolve into the atomic structure of
 the first material.
 - 20 2. The slip system of claim 1, wherein the first
 material is comprised of steel and the second material is
 comprised of a non-steel metallic material.
 - 25 3. The slip system of claim 2, wherein the non-steel
 metallic material is chosen from the group consisting of
 copper alloys, bronze alloys, nickel alloys and aluminum
 alloys.
 - 30 4. The slip system of claim 2, wherein the non-steel
 metallic material has a hardness in a range of 35 to 56
 Rockwell Hardness C Scale.
 - 35 5. The slip system of claim 2, wherein the slip
 assembly comprises a plurality of fingers that engage a
 plurality of grooves in the slip bowl to prevent a lateral

movement of the slip assembly with respect to the slip bowl
while allowing for a rotational movement of the slip assembly
5 with respect to the slip bowl.

6. The slip system of claim 2, wherein the non-steel
metallic material has a thickness in a range of 1/4 to 1/16
inches.

10 7. The slip system of claim 2, wherein the non-steel
metallic material is a coating that is attached to the
interactive contact surface of either the slip bowl or the
slip assembly.

15 8. The slip system of claim 2, wherein the non-steel
metallic material is a welded to the interactive contact
surface of either the slip bowl or the slip assembly.

20 9. The slip system of claim 2, wherein the non-steel
metallic material is a attached to the interactive contact
surface of either the slip bowl or the slip assembly by a
mechanical fastening means.

25 10. A method of reducing cold welding between a slip
assembly and slip bowl of an oil or gas well slip system
comprising:

 providing a slip bowl having an interactive contact
surface;

30 providing a slip assembly having a mating
interactive contact surface for slidable engagement with the
slip bowl interactive contact surface, wherein the slip bowl
and the slip assembly are each comprised of a first material;
and

attaching a second material to the interactive
contact surface of either the slip bowl or the slip assembly,
5 wherein the second material is compositionally different from
the first material to prevent cold welding between the slip
bowl and the slip assembly and wherein the second material has
little or no tendency to dissolve into the atomic structure of
the first material.

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 11. The slip system of claim 10, wherein the first
material is comprised of steel and the second material is
comprised of a non-steel metallic material.

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 12. The slip system of claim 11, wherein the non-steel
metallic material is chosen from the group consisting of
copper alloys, bronze alloys, nickel alloys and aluminum
alloys.

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 13. The slip system of claim 11, wherein the non-steel
metallic material has a hardness in a range of 35 to 56 HRC.

 14. The slip system of claim 11, further comprising
forming a plurality grooves in the slip bowl and forming a
25 plurality of mating fingers in the slip assembly that engage
the slip bowl grooves to prevent a lateral movement of the
slip assembly with respect to the slip bowl while allowing for
a rotational movement of the slip assembly with respect to the
slip bowl.

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 15. The slip system of claim 11, wherein the non-steel
metallic material has a thickness in a range of 1/4 to 1/16
inches.

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16. The slip system of claim 11, wherein attaching the non-steel metallic material comprises coating the non-steel metallic material to the interactive contact surface of either the slip bowl or the slip assembly.

17. The slip system of claim 11, wherein attaching the non-steel metallic material comprises welding the non-steel metallic material to the interactive contact surface of either the slip bowl or the slip assembly.

18. The slip system of claim 11, wherein attaching the non-steel metallic material comprises attaching a mechanical fastening means to the non-steel metallic material and to the interactive contact surface of either the slip bowl or the slip assembly.

19. An oil or gas well slip system comprising:
a first movable member having an interactive contact surface;
a second movable member having a mating interactive contact surface for slidable engagement with the interactive contact surface of the first movable member, wherein the first and second movable members are each comprised of a first material; and
a second material attached to the interactive contact surface of either the first or the second movable member, wherein the second material is compositionally different from the first material.

20. The slip system of claim 19, wherein the first movable member is a slip bowl.

21. The slip system of claim 19, wherein the second movable member is a slip assembly.

5 22. The slip system of claim 19, wherein the first movable member is a slip bowl and the second movable member is a slip assembly.

10 23. The slip system of claim 19, wherein the second material is compositionally different from the first material to prevent cold welding between the first and second movable members.

15 24. The slip system of claim 23, wherein the second material has little or no tendency to dissolve into the atomic structure of the first material.

20 25. The slip system of claim 19, wherein the first material is comprised of steel and the second material is comprised of a non-steel metallic material.

25 26. The slip system of claim 25, wherein the non-steel metallic material is chosen from the group consisting of copper alloys, bronze alloys, nickel alloys and aluminum alloys.

30 27. The slip system of claim 25, wherein the non-steel metallic material has a hardness in a range of 35 to 56 Rockwell Hardness C Scale.

35 28. The slip system of claim 22, wherein the slip assembly comprises a plurality of fingers that engage a plurality of grooves in the slip bowl to prevent a lateral movement of the slip assembly with respect to the slip bowl

while allowing for a rotational movement of the slip assembly with respect to the slip bowl.

5 29. The slip system of claim 25, wherein the non-steel metallic material has a thickness in a range of 1/4 to 1/16 inches.

10 30. The slip system of claim 25, wherein the non-steel metallic material is a coating that is attached to the interactive contact surface of either the first or the second movable member.

15 31. The slip system of claim 22, wherein the second material is a coating that is applied to the interactive contact surface of either the slip bowl or the slip assembly.

20 32. The slip system of claim 25, wherein the non-steel metallic material is welded to the interactive contact surface of either the first or the second movable member.

25 33. The slip system of claim 22, wherein the second material is welded to the interactive contact surface of either the slip bowl or the slip assembly.

30 34. The slip system of claim 25, wherein the non-steel metallic material is attached to the interactive contact surface of either the first or the second movable member by a mechanical fastening means.

35 35. The slip system of claim 22, wherein the second material is attached to the interactive contact surface of either the slip bowl or the slip assembly by a mechanical fastening means.

5 36. A method of reducing cold welding between a first
movable member and a second movable member in an oil or gas
well slip system comprising:

 providing a first movable member comprising an
interactive contact surface;

10 providing a second movable member comprising a
mating interactive contact surface for slidable engagement
with the interactive contact surface of the first movable
member, wherein the first and second movable members are each
comprised of a first material; and

15 attaching a second material to the interactive
contact surface of either the first or the second movable
member, wherein the second material is compositionally
different from the first material.

20 37. The method of claim 36, wherein the first movable
member is a slip bowl.

 38. The method of claim 36, wherein the second movable
member is a slip assembly.

25 39. The method of claim 36, wherein the first movable
member is a slip bowl and the second movable member is a slip
assembly.

30 40. The method of claim 36, wherein the second material
is compositionally different from the first material to
prevent cold welding between the first and second movable
members.

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41. The method of claim 40, wherein the second material
has little or no tendency to dissolve into the atomic
5 structure of the first material.

42. The method of claim 36, wherein the first material
is comprised of steel and the second material is comprised of
a non-steel metallic material.

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43. The method of claim 42, wherein the non-steel
metallic material is chosen from the group consisting of
copper alloys, bronze alloys, nickel alloys and aluminum
alloys.

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44. The method of claim 42, wherein the non-steel
metallic material has a hardness in a range of 35 to 56
Rockwell Hardness C Scale.

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45. The method of claim 39, wherein the slip assembly
comprises a plurality of fingers that engage a plurality of
grooves in the slip bowl to prevent a lateral movement of the
slip assembly with respect to the slip bowl while allowing for
a rotational movement of the slip assembly with respect to the
25 slip bowl.

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46. The method of claim 42, wherein the non-steel
metallic material has a thickness in a range of 1/4 to 1/16
inches.

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47. The method of claim 42, wherein the non-steel
metallic material is a coating that is attached to the
interactive contact surface of either the first or the second
movable member.

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48. The method of claim 39, wherein the second material
is a coating that is applied to the interactive contact
5 surface of either the slip bowl or the slip assembly.

49. The method of claim 42, wherein the non-steel
metallic material is welded to the interactive contact surface
of either the first or the second movable member.

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50. The method of claim 39, wherein the second material
is welded to the interactive contact surface of either the
slip bowl or the slip assembly.

51. The method of claim 42, wherein the non-steel
metallic material is attached to the interactive contact
surface of either the first or the second movable member by a
mechanical fastening means.

52. The method of claim 39, wherein the second material
is attached to the interactive contact surface of either the
slip bowl or the slip assembly by a mechanical fastening
means.

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